

ABSTRACT

Photoresists are provided that are useful for imaging with high energy radiation sources, such as EUV, electron beam, ion beam and x-ray radiation. Resists of the invention can exhibit enhanced sensitivity and resolution upon such high energy imaging. In a first aspect, preferred resists of the invention can be characterized in part as having a high concentration of photoacid generator compound(s) relative to other resist components. In a further aspect, chemically-amplified positive-acting photoresists are provided that exhibit enhanced photoacid generation efficiency upon high energy exposures.